



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,837	03/20/2001	Shunpei Yamazaki	12732-022001 / US4790	8400

26171 7590 10/13/2005

FISH & RICHARDSON P.C.
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER

CHIANG, JACK

ART UNIT PAPER NUMBER

2642

DATE MAILED: 10/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,837

Applicant(s)

YAMAZAKI ET AL.

Examiner

Jack Chiang

Art Unit

2642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,10,11,20-22,31,39,47,66,74,75,84,92,93,102,103 and 105-121 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/3/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Continuation of Disposition of Claims: Claims withdrawn from consideration are 10,11,20-22,31,39,47,66,74,75,84,92,93,102,103 and 105-121.

CLAIMS

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danielson (WO 94/19736) in view of Jacobsen et al. (US 6232937).

Regarding claims 1-2, Danielson discloses an electronic device comprising:

The operation key or keys (15 or 16);

The direction of images displayed by each of the operation keys is switchable between a first orientation and a second orientation (figs. 2-3).

Danielson differs from the claimed invention in that it does not explicitly show that the keys having LEDs.

However, it is commonly seen that image is displayed by LED matrix. This is shown by Jacobsen (figs. 5e, 5g), and an image displayed can be switchable between a first orientation and a second orientation (figs. 9b, 9e).

Hence, the concept of switching the keys from a first orientation to a second orientation is well taught by Danielson (figs. 2-3). This also includes the concept of having key image (displayed by display 15) in two orientations. It would have been obvious for one skilled in the art to apply Jacobsen's method of the LED matrix in Danielson, such that the displayed image can be controlled by the switching/control of the LED matrix, this

Art Unit: 2642

method is notoriously well known in the art, including the key image displayed in two orientations by the display 15 shown by Danielson, and yet the basic concept of providing the keys in different orientations is substantially unchanged.

Danielson further differs from the claimed invention in that show audio input/output portions and a display.

However, Jacobsen further shows the audio input/output portions and a display (i.e. 1234, 1230 in fig. 8h, see also fig. 10A).

Hence, it would have been obvious for one of ordinary skill in the art to apply the combination of Danielson and Jacobsen in the phone environment which usually have audio input/output portions and display, this simply can be considered as an intended use of the combination as it is shown in Jacobsen's phone environment, because it is commonly seen that today's electronic devices having various functions, including phone function.

The combination of Danielson and Jacobsen further differs from the claimed invention in that it does not explicitly mention that the display comprises a gate signal line, a source signal line, and the active element is connected to the gate signal line and the source signal line.

However, from page 24, second paragraph of the present application, applicant has admitted that such connection of the display active element to the gate signal line and the source signal line is well known in the art. Therefore, it would have been obvious for one of ordinary skill in the art to adapt such well known circuit design to drive the display active element in the combination of Danielson and Jacobsen, because it is understood

Art Unit: 2642

that such display active elements needed to be driven by such gate signal line and the source signal line as it is commonly done in the art and admitted by applicant.

RESTRICTION

3. The restriction dated on 8/16/05 is made final.

Applicant's election without traverse of claims 1-2 in the reply filed on 9/9/05 is acknowledged.

Claims 1-2 are examined.

Claims 10, 11, 20-22, 31, 39, 47, 66, 74, 75, 84, 92, 93, 102, 103 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4/13/04.

Claims 105-121 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/9/05.

ARGUMENT

4. In response to the remarks (pages 9 and 10), applicant mainly argues about Danelson's keys 16. The examiner is now reading the claimed keys as Danelson's keys 15 or 16, see rejection above.

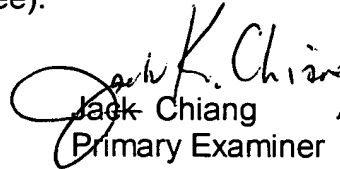
Art Unit: 2642

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack Chiang whose telephone number is 571-272-7483.

The examiner can normally be reached on Mon.-Fri. from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jack Chiang
Primary Examiner
Art Unit 2642